

Swiss Guidelines for safe Dry Needling

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Preface:

This document defines the guidelines for safe Dry Needling (DN). These guidelines are based on the Irish Dry Needling guidelines, which were developed by Dry Needling instructors and specialists from various nations and are known as an International Standard.

These explicit guidelines apply to all Dry Needling therapists. In some countries Dry Needling is not permitted to be practiced by therapists, as it is an invasive method. It is the responsibility of each therapist to check the legal situation in his/her country.

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1. Introduction

Dry Needling (DN) is the name given to the treatment of pain and dysfunction of the musculoskeletal system through usage of sterile disposable acupuncture needles. Although acupuncture needles are used to practice DN, classical acupuncture and DN have nothing in common.

DN is a minimally invasive technique for which special instructions must be followed. There are several treatment models of which the Triggerpoint model is mostly used. (Travell and Simons 1983; Travell and Simons 1992; Simons, Travell et al. 1999).

The term Triggerpoint-Dry-Needling is used for treatments of myofascial Triggerpoints (MTrPs) with DN. A further model of DN is intramuscular stimulation (IMS) based on (Gunn 1997).

Both Triggerpoint-Dry-Needling and IMS are termed „Deep Dry Needling“ (DDN). Apart from DDN there is also the model of „Superficial Dry Needling“ (SDN) on Baldry (Baldry 2005). The developed guidelines for security, contraindications and complications, found in this document, count for all forms of DN.

Whilst describing specific techniques and treatment sequences the focus here is on Triggerpoint-Dry-Needling.

DN was developed from the MTrP-Injectiontechniques, described by Travell. Steinbroker (Steinbroker 1944) and later Travell (Travell 1968) recognised that the treatment effect was succeeded by the prick into the taut band and the following local twitch, rather than the injected substance.

The first publication in a Peer Reviewed Journal about DN came from Lewitt (Lewitt 1979). Hong (Hong 1994) explained the meaning of the local twitch whilst treating a taut band and indicated that the mechanical effect of the needle in a MTrP is more important than the used substance. Other Reviews also made the point, that the treatment of MTrPs with DN is as effective as an injection (Cummings and White 2001, Ga et al. 2007)

In 2011 the book „Myofascial pain an Triggerpoints : diagnosis and evidence based therapy strategies – The Top-30-Muscles“ of Reichlich, Gröbli and Dommerholt was published and it shows the different models of DN including diverse detailed practical instructions (Reilich, Dommerholt, Gröbli, 2011).

2. Indication for Dry Needling

DN is used for pain and dysfunction of the musculoskeletal system of various origins. DN is used mostly for treatment of myofascial triggerpoints. Further indications are among several others for example insertional tendinopathy, scarpain, soft tissue pain and tensioned muscles.

3. Contraindications for Dry Needling

In certain cases DN is not permitted to be practiced or only with special precaution.

3.1. Acute systemic Infections with or without fever

Patients with acute systemic infections must not be treated with DN, as the reaction of a DN treatment cannot be seen in advance and the patients should be in medical care.

3.2. All acute emergencies

All acute emergencies and life threatening emergencies must get medical treatment and must not be treated with DN.

3.3. Anticoagulant and coagulant dysfunction

Patients with a native coagulant dysfunction or patients who take anticoagulant medicine and have a INR-Score of more than 1.5, are not to be treated with DN. Patients who are in treatment with inhibiting aggregation of thrombocytes medicine (Azetylsalizylacid, Clopidogrel, Heparin) must be treated carefully.

3.4. No explicit consent from the patient

Patients must be informed about all possible risks with DN. Patients must give their full consent to a DN treatment. If a patient is not capable of giving full consent (for example because of cognitive reduction) the patient must not be treated with DN. A reason for not agreeing can be needlephobia. In this case, the therapist should not try to persuade the patient to a DN treatment.

3.5. Paresthesia

Patients with significant paresthesia must not be treated with DN as they are incapable of adequate feedback.

3.6. Lymphoedema and condition after Lymphnode removal

Lymphoedema is a local contraindication as the infection risk in the area of the Lymphedema is increased immensely. For this reason it is suggested that there should be no DN applied in the affected area of the body following a surgical removal of a Lymphnode.

3.7. Increased risk for infection

Patients with an increased risk of infection, such as immunodeficient patients or diabetic patients, must be treated with great care.

3.8. Change of the skin

DN treatment should not be administered in the area of skin alterations, skin infections and allergic skin reactions.

3.9. Tumors

DN should not be applied in the area of tumors. Tumorpatients must only be treated with DN with special caution and due consideration of point 3.6.

3.10. Haematomas

Due to the increased risk of an infection DN should not be used as a therapy in the area of a haematoma.

3.11. Osteosynthesis and joint replacement

Due to an increased risk of infection, DN should not be applied in the immediate vicinity of an osteosynthesis or a joint replacement due to reduced immune reaction.

3.12. Implants

Any form of implant is an absolute local contraindication. Needle contact with an implant must be avoided.

3.13. Cardiac pacemaker

Patients with a cardiac pacemaker must not be treated with intramuscular electrical stimulation (IMES).

3.14. Pregnancy

Pregnant patients must be treated with great caution. This also applies for the first trimester. If a DN treatment is applied, the patient must give permission.

3.15. Children

Minors may only be treated with their own and their parents consent.

3.16. Psychiatric patients

Patients with psychiatric disorders are to be treated with DN only if the patient agrees and understands the procedure and risks of DN, can interpret the stimuli correctly and can give his full consent.

3.17. Contagious diseases

Patients with infectious diseases (through blood) should be treated with special precaution.

3.18. Allergic reactions to material used in DN

Where there is a known nickel allergy the patient must be treated with care. Allergic reactions to other materials must be treated with care. For example the usage of latexfree gloves.

3.19. Epilepsy

Patients with epilepsy must be treated with care.

3.20. Severe pulmonary diseases

Patients with a severe pulmonary disease should not be treated near the thorax.

3.21. Mucous membranes, eyes, genitals

4. Important general requirements for Dry Needling application

- 4.1. DN therapists only apply DN in areas of the body that they have been trained for.
- 4.2. DN therapists know the limitations of DN and if required choose other treatment methods.
- 4.3. DN therapists only apply DN if they are completely sure that they can apply DN to the best of their knowledge and ability.
- 4.4. DN therapists educate themselves continuously in DN treatment.
- 4.5. DN therapists are informed about the newest scientific findings in DN and integrate their knowledge in their treatment.
- 4.6. DN therapists know the regulations regarding the disposal of medical waste.
- 4.7. Employed DN therapists inform their employer if they want to apply DN.
- 4.8. Self-employed DN therapists are responsible for adaption to their liability insurance.
- 4.9. DN therapists record a comprehensive case history and further keep detailed records of patient agreements along with the progress and reactions to DN treatments.
- 4.10. Possible DN incidents must be reported immediately for statistical reasons, e.g. at the anonymous registration office for the Dry-Needling-Association Switzerland (DVS) www.dryneedling.ch.
- 4.11. It is suggested that DN therapists are vaccinated against hepatitis A/B.

5. Handling of Patients in Dry Needling.

Patients must be informed about different aspects of a Dry-Needling-Treatment, before their first therapy session:

- 5.1. The aims and indication of a DN treatment.
- 5.2. The different methods of a DN treatment (SDN, DDN) along with the advantages and disadvantages.
- 5.3. The fact, that DN is not to be mistaken for classical acupuncture.
- 5.4. The expected reactions during a treatment and the significance of the treatment. Which include:
 - A short prick through the skin
 - A local twitch response
 - Dull pain
 - Temporary reproduction of the known pain or a part of it.
- 5.5. Unwanted reactions and their significance during a treatment including:
 - Strong pain whilst piercing the skin
 - Burning, sharp or pricking pain during a treatment
- 5.6. The patient must have the possibility to interrupt the treatment at all times with a prearranged signalword or codeword, such as „stop“!
- 5.7. The exclusive usage of disposable sterile acupuncture needles
- 5.8. Frequent and normal reactions following a DN treatment include:
 - Small haematomas
 - Posttreatment soreness of the treated muscles
- 5.9. The possible complications of a DN treatment.

6. Practical principals in Dry Needling

6.1. Checking contraindications

6.2. Positioning of the patient

- 6.2.1. The patient is normally treated in a lying position. The patient should, with the aid of support cushions, be settled as relaxed as possible. The treated muscle should be easily accessible.
- 6.2.2. It is recommended that the DN therapist should, when possible, see the face of their patient in order to watch their reactions. If this is not possible then continual verbal communication with the patient is recommended.

6.3. DN therapists position

- 6.3.1. The DN therapist should, when possible, be seated in order to hold the needle still and palpate the muscle precisely.
- 6.3.2. Sterile one way acupuncture needles, a medical sharps collector, skin and hand disinfection, swabs, gloves should be ready on a trolley.
- 6.3.3. The trolley should always be positioned on the side of the needle leading hand, so that the DN therapist can reach it without any difficulty.
- 6.3.4. It is important that the medical sharps collector be opened before treatment and swabs must be ready to use.

6.4. Palpation and treatment preparations

- 6.4.1. The muscle to be treated must be identified.
- 6.4.2. Identification of the anatomical landmarks, which are necessary for secure DN.
- 6.4.3. Palpation of the TP and the taut band plus the estimation of the deepness of the TP.
- 6.4.4. Choice of the suitable needle.
- 6.4.5. Realisation of possible risks in the area of the treatment.
- 6.4.6. Choice of the palpation technique: either flat palpation or pincer grip.
- 6.4.7. If the DN therapist is not capable of identifying the muscle and the landmarks the treatment must not be administered.

6.5. Needle techniques

In Chapter one (Introduction), the various possibilities of DN techniques are described. The guidelines refer primarily to Triggerpoint-Dry-Needling but also apply to all forms of DN.

- 6.5.1. As described in the above chapter, the muscle must be identified and the MTrP located and palpated.
- 6.5.2. The palpating hand holds the muscle in a pincer grip or with flat palpation and the other hand (usually the dominant hand) holds the needle solely at the shaft of the needle.
- 6.5.3. The DN therapist is aware of the potential vulnerable structures in the treated area.
- 6.5.4. The DN therapist is prepared for sudden and uncontrollable movements of the patient. For this reason, the hand holding the needle should be stabilised on the patient.

- 6.5.5. The chosen needle should be as short as possible, but as long as required to reach the MTrP.
 - 6.5.6. Before the insertion of the needle the DN therapist must fulfil all the required hygienic measures which are described in detail in chapter 8.
 - 6.5.7. After the insertion of the needle the MTrP, respectively the taut band is sought. This is carried out with controlled movement of the needle – either in a cone or a flat form. Thereby the needle point must never leave the area between the landmarks defined in advance. The needle should not bend and the direction of the needle must be controlled by repeated unclaspings of the needle. If a needle bends, it must be replaced with a new one.
 - 6.5.8. If a local twitch response is elicited, the needle can a) be left in place until the cramp eases (static Dry Needling) or b) be moved repeatedly into the taut band until the local twitch stops or lessens (dynamic Dry Needling). The choice of type and dosage must be discussed with the patient.
 - 6.5.9. If static Dry Needling or superficial Dry Needling is applied, the patient may be left by himself for a short period of time. The patient must be able to attract the attention of the therapist at all times.
 - 6.5.10. If a needle becomes blunt, for example through repeated touching of the bone, the needle must be replaced with a new one.
 - 6.5.11. The DN therapist should communicate with the patient throughout the entire treatment. The patient must be capable of describing the various pains throughout the treatment and describe the pain to the therapist. If this is not possible, it is not permitted to practice DN. If there is a burning or pricking pain after puncturing the skin, the direction of the needle must be altered in order to release the pain.
 - 6.5.12. After treatment the needle must be disposed of in the medical sharps collector.
- 6.6. Posttreatment**
- 6.6.1. If bleeding starts after the removal of the needle, the area must be compressed with swabs until the bleeding stops.
 - 6.6.2. Appropriate measures to ease the pain after a DN treatment should be explained to the patient.
 - 6.6.3. A short after-treatment with manual Triggerpoint therapy helps to reduce the pain after the treatment.

7. Specific anatomical guidelines for Dry Needling

7.1. Dry Needling in the area of nerves

7.1.1. There is a risk of a nerve injury.

7.1.2. Local safety guidelines in the area of nerves:

- Mark the run of the nerve
- If possible, the treated muscle must be brought, through a pincer grip, into a position where the nerve is not endangered.
- The needle must be advanced slowly into the tissue and must be withdrawn immediately if the patient feels a shooting, stinging and/or burning pain.

7.2. Dry Needling in the area of blood vessels

7.2.1. There is a risk of injury of blood vessels.

7.2.2. Local safety guidelines in the area of blood vessels:

- Localisation of the superficial blood vessels, mark the main arteries.
- If possible, the treated muscle must be brought in a position through a pincer grip where the blood vessels are not endangered.
- The needle must be advanced slowly into the tissue and must be withdrawn immediately if the patient feels a stinging and/or burning pain.

7.3. Dry Needling in the area of lymph nodes

It is not permitted to apply Dry Needling in the area of enlarged or painful lymph nodes

7.3.1. There is a risk of an infection of lymph nodes.

7.3.2. Local safety guidelines:

- Lymph nodes must be identified and differentiated from trigger points.
- In case of doubt Dry Needling should not be applied.

7.4. Dry Needling in the area of joints

7.4.1. An intra articular infection is a local danger when needling in the area of joints.

7.4.2. Local safety guidelines:

- The exact position of the joint and the articular capsule must be identified.
- If possible, the treated muscle must be brought in a position through a pincer grip, where the joint and articular capsule are not endangered.
- If the pincer grip is not possible only superficial Dry Needling should be applied to avoid needling the joint.

7.5. Dry Needling in the area of the thorax

7.5.1. Local danger zones at the thorax are:

- The lung
- Kidney and liver in the caudal area of the thorax
- Facet- and ribjoints

7.5.2. Local safety guidelines:

- During one therapy session it is permitted to treat one side of the thorax only. A bilateral pneumothorax must be avoided at all times.

- If possible, take the treated muscle in a pincer grip and direct the needle tangential to the thorax.

7.6. Dry Needling in the area of the abdomen and the lower back

7.6.1. Local danger zones in the area of the abdomen are:

- Peritoneum and retroperitoneum
- Internal organs
- Lung, heart, large blood vessels
- Nerve roots

7.6.2. Local safety guidelines

- The abdominal muscles should only be treated with Dry Needling if it is possible to grasp the muscle into a pincer grip to protect the internal organs.
- The rectus abdominis muscle is treated from lateral, tangential to the abdomen.
- The quadratus lumborum muscle is consequently treated behind the retroperitoneum in the frontal plane. The needle tip should not be moved ventral towards the abdomen nor cranial towards the lung.

7.7. Dry Needling of hands and feet

7.7.1. Local dangers in the area of hands and feet are:

- The very sensitive palm and the sole of the foot.
- The „danger zones“ joints, nerves and blood vessels which are very close together.

7.7.2. Local safety guidelines

- The palm and the sole of the foot must not be needled.
- In order to reduce the risk of injury to a minimum, the needle should be chosen as thin as possible (for example 0.16mm diameter).

8. Hygienic arrangements for Dry Needling

8.1. Introduction

Dry Needling is an invasive treatment which holds risks such as infection and injury. Hygienic arrangements should minimise the risks.

The evidence based recommendation of the Center of Disease Control (CDC) from 1996 respectively 2007 aim for prevention concerning the transfer of infection germs when in contact with patients.

It is assumed that every person is potentially infectious or colonised with an organism which could be transferred during treatment. The listed measurements apply when there is contact with blood, body fluid (exception sweat), mucosa and injured skin. The following list has been specially adapted for Dry Needling Therapy:

- Handhygiene and general hygiene
- Wearing of unsterile gloves
- Contact with external bleeding
- Patient positioning
- Needle handling
- Disinfection of the skin
- Safe needle handling
- Handling an injury caused by the needle
- Handling of the disposal of the needle and waste
- Dealing with reusable therapeutical devices

8.2. Handhygiene and general hygiene

Before and after Dry Needling but also after contact with blood, the hands should be washed with soap and water and then be disinfected. When coughing or sneezing the elbow must be held in front of the mouth. Coughing or sneezing into the hands or the treated area must be avoided.

8.3. Wearing of unsterile gloves

It is suggested, when Dry Needling, to wear unsterile gloves to protect oneself, especially with possible contact with blood. After Dry Needling the gloves should be taken off and disposed of. The hands should then be washed.

8.4. Contact with external bleeding

Any external bleeding should be stopped with swabs. Blood contact with the therapist's skin must be avoided. The swabs should be disposed of immediately after usage and hands must be washed with soap and water.

8.5. Needle handling

All needles have an expiry date concerning their sterility. If the date has expired, the needle must be disposed of. The needle is only to be held at its shaft. Any contact beyond the shaft must be avoided in order to keep the needle sterile. The sterile needles are one way needles.

8.6. Disinfection of the skin

The skin must be disinfected with a disinfectant before each puncture. The disinfected area must be visibly moist. Allow the antiseptic to dry and then continue with needling.

8.7. Secure needle handling

When handling the needle the direction of the needle must be chosen carefully to avoid any danger for the surrounding structures (arteries, nerves, joints, internal organs, lung etc). If possible the pincer grip should be used. Each prick must be thought through thoroughly in consideration of the anatomical conditions. Dry Needling must be applied at ease and without time pressure.

8.8. Handling an injury caused by the needle

If the therapist pricks him/herself or someone else with a used needle, the wound must be cleansed with soap and water immediately and then disinfected (for example with alcohol 70%). It must then be checked for any risk of infection (see 10.9.).

8.9. Handling of the disposal of the needle and waste

After needling the used needle must be disposed of in a medical sharps collector which is ready for direct disposal of needles. A used needle must never be returned to its packaging nor be thrown into a rubbish bin.

8.10. Dealing with reusable therapeutical devices

Items e.g. massage aids which come in contact with different patients must be disinfected after each use. This is especially important following the use of the item in a body area where Dry Needling has been administered.

9. Possible complications with Dry Needling

The most possible normal and harmless side effects in Dry Needling are small haematomas in the area of the treatment and muscle pain which can last for upto 4 days. Improper use of DN can theoretically lead to complications, as listed below:

9.1. Pneumothorax

9.1.1. Definition

Pneumothorax is defined as the presence of air or gas in the pleural cavity (ie, the potential space between the visceral and parietal pleura of the lung), which can impair oxygenation and/or ventilation. The clinical results are dependent on the degree of collapse of the lung on the affected side. If the pneumothorax is significant, it can cause a shift of the mediastinum and compromise hemodynamic stability. Air can enter the intrapleural space through a communication from the chest wall (ie, trauma) or through the lung parenchyma across the visceral pleura

9.1.2. Clinical signs

The individual pain is diverse. The classical trias includes thoraxpain, coughing and shortness of breath. The diagnosis can be made through x-ray or ultrasound.

9.1.3. Procedure

If a pneumothorax is suspected, the diagnosis must be enforced. The patient must therefore be referred to an emergency unit.

9.2. Traumas of internal organs

9.2.1. Definition

With Dry Needling an injury of an internal organ can be caused by the needle. A haematoma can be caused or an injury to the gastrointestinal tract which can lead to a serious intraabdominal infection.

9.2.2. Clinical signs

The individual symptoms are very variable. Bleeding can cause damage to organs or shock. Signs for shock are tachycardia, decreased blood pressure, collapse of the throat veins, thirst, reduced micturition, flat breathing followed by reduced consciousness. Perforation of hollow organs and emission of gastrointestinal content can lead to a peritonitis with sepsis, which expresses itself with abdominal pain, a tight abdominal wall and a high temperature.

9.2.3. Procedure

If a heavier relevant bleeding is suspected the patient must be referred to an emergency unit. Small haematomas without signs of shock can be analysed through ultrasound or MRT. In both cases medical advice should be called. This refers especially if there is suspicion of perforation of hollow organs (gastrointestinal tract or bladder).

9.3. Injury to nerves

9.3.1. Definition

Neuropraxia: This is the least severe form of nerve injury, with complete recovery. In this case, the axon remains intact, but there is myelin damage causing an interruption in conduction of the impulse down the nerve fiber. Most commonly, this involves compression of the nerve or disruption to the blood supply (ischemia). There is a temporary loss of function which is reversible within hours to months of the injury (the average is 6–9 weeks).

Axonotmesis: This is a more severe nerve injury with disruption of the neuronal axon, but with maintenance of the epineurium. This type of nerve damage may cause paralysis of the motor, sensory, and autonomic system.

Neurotmesis: Neurotmesis is the most severe lesion with potential of recovering. It occurs on severe contusion, stretch or laceration. Not only the axon, but the encapsulating connective tissue, loses its continuity.

9.3.2. Clinical signs

The clinical signs comply with the type of neural injury. The most likely expected injury when applying Dry Needling is a neurapraxia. Neural damage can also appear through pressure by a haematoma. In this case a neural damage such as axonotmesis is possible.

9.3.3. Procedure

The prognosis for the rehabilitation of a neurapraxia is good. The axon is maintained. The symptoms regress fully and spontaneously within days or weeks. A lesion of a nerve should be seen by a doctor. An axonotmesis also has a good prognosis, although the rehabilitation can last a few months. The duration of the healing process depends on the distance between the place of the lesion and the end organ (muscle or skin). The speed of the reinnervation is on average 1mm per day.

9.4. Bleedings

9.4.1. Definition

Bleedings can occur outwards or inwards into the body and cause a haematoma. They are possible in all vessels of the circulation. When applying Dry Needling, haematomas very often appear in the skin or in the muscle. An arterial bleeding spreads quickly and pulsates. Depending on the surrounding tissue (compartment), the bleeding can cause pressure and pressure damage.

9.4.2. Clinical signs

With Dry Needling, external bleeding provides no clinical problems. Bleedings into the skin provoke a haematoma. Where there is an arterial bleeding a large haematoma of palpable volume develops fast and is typical. Great loss of blood can cause a shock.

9.4.3. Procedure

The first aim is to stop the bleeding. A small external bleeding can be stopped with a swab. An arterial bleeding or a larger venous bleeding into the skin or muscle must be compressed.

9.5. Infections

9.5.1. Definition

The term infection is understood to mean an active or passive infiltration and the following increase of micro organism to a host (macro-organism). With Dry Needling it concerns percutaneous infection. According to the dimension of the infection there is a differentiation of a local infection or a generalised infection.

9.5.2. Clinical signs

A local infection at the place of entry causes symptoms such as redness, swelling, heat and pain. As a result the local lymphnodes are often painful and swollen. General infections show severe generalized symptoms usually with fever.

9.5.3. Procedure

Bacterial infections are treated with antibiotics. Viral infections, depending on which virus, are treated with passive immunisation, virostatic or symptomatically. In the case of infections a doctor or even a specialist in Infectious must be consulted.

9.6. Vegetative reactions

9.6.1. Definition

A vegetative reaction is present when the stimulus conduction in the vegetative nervous system is changed. It involves autonomous, involuntary phenomena, for example changes to blood pressure, pulse, respiratory rate, perspiration and digestion. When emotional distress, stress and hectic occur, irregularities in the vegetative nervous system can trigger functional discomforts of individual organs without objectifiable structural findings.

9.6.2. Clinical signs

The following symptoms can express a vegetative reaction: nervousness, agitation, irritability, dizziness, breathlessness, headache, muscle cramps, extrasystole, tachycardia, cardiac pain, anxiety, cold hands, stomach problems, paleness and loss of consciousness.

9.6.3. Procedure

The Dry Needling therapy must be stopped, the patient should be calmed and allowed to relax. In case of unconsciousness they must be put in lateral position. By uncertainty an emergency doctor should be called.

9.7. **Broken needles**

9.7.1. Procedure

A broken needle must be removed immediately. If the needle point disappears into the skin or into the muscle, the place of entry must be marked. Care should be taken that the patient does not move the affected part of the body. The patient must be referred to an emergency unit.

9.8. **Needle injury to the therapist or a third person**

9.8.1. Procedure

No action need be taken if the needle is still sterile (if necessary local treatment of the wound).

If the needle has already been in contact with the patient, the wound must be washed out thoroughly with soap and water and disinfected (e.g. with 70% alcohol). It is then important to clarify any risk of infection.

10. Legal indications

10.1. Use of these guidelines

The afore mentioned therapy methods/techniques are administered at ones own risk and the SDA (Swiss Dry Needling Association) will not be made responsible. This text exclusively provides information regarding the safety guidelines for Dry Needling. They are on no account to be seen as publicity, as sales promotion or as a service in healthcare. The therapy methods/techniques may only be practiced by registered qualified specialists.

10.2. Liability exclusion

The SDA offers no guarantee for the suitability of the here mentioned therapy methods/techniques for any one person and explicitly states that a specialist must always be called upon. The SDA endeavors to provide high quality information, but takes no responsibility for the accuracy, correctness, up-to-dateness and completeness of this information. Any dispute regarding the here described facts is subject to Swiss law. Exclusive jurisdiction is Winterthur Switzerland.

10.3. Actuality of the here given information

The SDA endeavors to continually update and amend all information. The SDA can, however, give no guarantee of the actuality of the information as the medical science and research is continually expanding.

10.4. Copyright

The Copyright lies with the authors and with the Swiss Dry Needling Association (SDA).

11. Literature

- Baldry, P. (2002). "Superficial versus deep dry needling." Acupunct Med 20(2-3): 78-81.
- Baldry, P. E. (2005). Acupuncture, Trigger Points and Musculoskeletal Pain. Edinburgh, Churchill
- Cummings, T. M. and A. R. White (2001). "Needling therapies in the management of myofascial trigger point pain: a systematic review." Arch Phys Med Rehabil 82(7): 986-92.
- Ga, H., H. J. Koh, et al. (2007). "Intramuscular and nerve root stimulation vs lidocaine injection to trigger points in myofascial pain syndrome." J Rehabil Med 39(5): 374-8.
- Gunn, C. C. (1997). The Gunn approach to the treatment of chronic pain. New York, Churchill Livingstone.
- Hong, C. Z. (1994). "Lidocaine injection versus dry needling to myofascial trigger point. The importance of the local twitch response." Am J Phys Med Rehabil 73(4): 256-63.
- Lewit, K. (1979). "The needle effect in the relief of myofascial pain." Pain 6: 83-90
- Reilich, P., Gröbli, C., Dommerholt, J. (2011). Myofasziale Schmerzen und Triggerpunkte: Diagnostik und evidenzbasierte Therapiestrategien. Elsevier
- Simons, D. G., J. G. Travell, et al. (1999). Travell and Simons' myofascial pain and dysfunction; the trigger point manual. Baltimore, Williams & Wilkins.
- Steinbrocker, O. (1944). "Therapeutic injections in painful musculoskeletal disorders." Jama 125: 397-401.
- Travell, J. (1968). Office hours: day and night. The autobiography of Janet Travell, M.D. New York, World Publishing.
- Travell, J. G. and D. G. Simons (1983). Myofascial pain and dysfunction; the trigger point manual. Baltimore, Williams & Wilkins.
- Travell, J. G. and D. G. Simons (1992). Myofascial pain and dysfunction: the trigger point manual. Baltimore, Williams & Wilkins.